N THE CLAIMS:

1. (Currently Amended) A method for canceling feedback in an acoustic system comprising a microphone, a signal path, a speaker, means for detecting presence of feedback between the speaker and the microphone, and filter means for compensating at least partly a possible feedback signal, the method comprising:

[-] using a LMS algorithm for generating filter coefficients;

[-] using a highpass filter to prevent low-frequency signals from entering the LMS algorithm;

[- where the] using an additional feedback cancellation filter and a noise generator [is used] for providing low-frequency input for the LMS algorithm.

2. (Currently Amended) A method according to claim 1, where a sign-swapping algorithm is used for generating a broad band noise signal[,] having an amplitude substantially equal to the amplitude of the signal from which it was derived.

3. (Currently Amended) A method according to any of the claims 1 or claim 2 where a steep low pass filter is used to generate a low-frequency noise signal to be used as an additional input to the LMS algorithm.

4. (Currently Amended) A method according to claim 1, where the LMS algorithm operates with a predetermined essentially level independent

adaptation speed when feedback is not present, this representing a first mode

[-] where the LMS algorithm operates at a level dependent adaptation speed when feedback is present, this representing a second mode;

[-] where the means for detecting the presence of feedback is used to control the adaptation mode selection of the LMS algorithm; and

[-] where the ~~update rate~~ adaptation speed for the LMS algorithm is determined by [the] a long-term average of a denominator in the LMS update algorithm in the second mode.

5. (Currently Amended) A method according to ~~any of the claims 1-4~~ claim 4, comprising a microphone, a signal path, a speaker, means for detecting presence of feedback between the speaker and the microphone, and filter means for at least partly compensating a possible feedback signal, the method comprising:

[-] using a bandwidth detection means for determining the presence of a feedback signal.

6. (Currently Amended) A method according to ~~any of the claims 1-5~~ claim 5, where the stability of the signal determined as a feedback signal is analyzed.

7. (Currently Amended) A method according to any of the claims 1-6 claim 6, where the feedback analyzing comprises holding flag values from a number of succeeding time frames and comparing of these.

8. (Currently Amended) A hearing aid comprising:

[-] a microphone;

[-] a signal path;

[-] a amplifier;

[-] a speaker;

[-] means for detecting feedback between the speaker and the microphone;

[-] filter means for at least partly compensating a possible feedback signal;

[-] memory means including a LMS algorithm for generating filter coefficients;

[-] at least one highpass filter for preventing low-frequency signals from entering the LMS algorithm; and

[-] an additional feedback cancellation filter and a noise generator for providing low-frequency input for the LMS algorithm.

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9.   (Original) A hearing aid according to claim 8, further comprising

steep low pass filters for generating a low-frequency noise signal to be

used as an additional input to the LMS algorithm.